

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (previously presented) A method for extracting and transforming content from a source page for transmission to a mobile device, said method comprising:

generating a stylesheet comprising information indicating said content to be extracted from said source page and transformation information for manipulating said content based on capabilities of said mobile device;

receiving a request to display said source page from the mobile device;

applying said stylesheet to said source page to produce a destination page, said destination page comprises said extracted content to be manipulated according to said transformation information; and

transmitting said destination page to said mobile device.

2. (previously presented) The method of claim 1, wherein the step of applying the stylesheet comprises:

retrieving said source page from a web server; and

identifying said content to be extracted using a site mining expression.

3. (previously presented) The method of claim 1, further comprising:

determining a site mining expression for uniquely locating said content to be extracted.

4. (previously presented) The method of claim 1, wherein the step of generating a stylesheet comprises:

receiving and storing to a site mining template said information indicating said content to be extracted and said transformation information for manipulating said content; and

compiling said template to produce said stylesheet.

5. (previously presented) The method of claim 1, wherein:

said source page comprises a XML compliant document.

6. (previously presented) The method of claim 1, wherein:

said source page comprises a HTML document.

7. (previously presented) A method for generating a stylesheet, comprising:

receiving an indication of an item of content to be extracted from a source page containing one or more items of content;

determining an expression for uniquely locating said item of content to be extracted;

receiving transformation information for manipulating said item of content;

storing said transformation information and said expression to a site mining template; and

converting said transformation information and said expression stored in said template to a stylesheet utilizable for mining content from said source page to produce a destination page containing said extracted content.

8. (previously presented) The method of claim 7, further comprising:

receiving format information for formatting a layout of the stylesheet.

9. (previously presented) The method of claim 7, further comprising:

receiving an indication of said source page;

retrieving said source page; and

displaying said one or more items of content contained in said source page for allowing a selection of said content to be extracted.

10. (previously presented) The method of claim 7, wherein:

said transformation information includes procedural tags for controlling a processing routine in said stylesheet.

11. (previously presented) The method of claim 7, wherein:

said transformation information includes transformation tags for manipulating content extracted from said source page in said stylesheet.

12. (previously presented) The method of claim 7, wherein:

said item of content is delineated by one or more tags.

13. (previously presented) The method of claim 7, wherein the step

of converting said transformation information comprises:

compiling said template with a two pass compilation process, a first pass generating a main body of said stylesheet and a second pass generating commands located outside of said main body.

14. (previously presented) The method of claim 7, wherein the step of determining an expression further comprises:

receiving filtering criteria to indicate content to be extracted, said criteria comprising at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

15. (previously presented) The method of claim 7, wherein the step of determining an expression further comprises:

receiving an indication of a root element; and

displaying content stemming from said root element;

wherein said content to be extracted is selected from said item of content stemming from said root element; and

wherein said expression is determined by combining an expression locating said root element with an expression locating said selected content relative to said root element.

16. (previously presented) The method of claim 7, wherein:

said source page comprises a XML compliant document.

17. (previously presented) The method of claim 7, wherein:

said source page comprises a HTML document.

18. (previously presented) The method of claim 7, wherein:

said expression comprises an XPath syntax expression.

19. (previously presented) The method of claim 7, wherein:

said stylesheet includes a XSLT stylesheet.

20. (previously presented) A method for generating a site mining expression for use in locating one item of content of a plurality of items of content contained in a source page, said method comprising:

displaying said plurality of items of content on a graphical user interface hierarchically in tree view form;

receiving a selection for said one item of content to be extracted from said source page;

displaying any graphical components of said one item of content selected in said step of receiving a selection; and

generating a site mining expression for locating said one item of content in said source page;

wherein said site mining expression is capable of locating content in a document written in an extensible markup language.

21. (previously presented) The method of claim 20, wherein:
said site mining expression comprises an XPath expression.

22. (previously presented) The method of claim 20, further comprising:

receiving said step of filtering criteria for indicating content to be extracted;

wherein said criteria includes at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

23. (previously presented) The method of claim 20, further comprising:

receiving a designation of an item of content as a root element; and
displaying items of content stemming from said root element;

wherein said item of content to be extracted is selected from said item of content stemming from said root element; and

wherein said expression is determined by combining an expression locating said root element with an expression locating said item of content to be extracted relative to said root element.

24. (previously presented) A system comprising a central computer for extracting and transforming content from a source page for transmission to a mobile device, said system comprising:

a processor to generate a stylesheet including information indicating said content to be extracted from said source page and transformation information for manipulating said content based on capabilities of said mobile device;

an interface in communication with said processor to receive a request to display said source page from said mobile device and to transmit a destination page to said mobile device;

wherein, upon receiving said request, said processor applies said stylesheet to said source page to produce a destination page which includes said extracted content manipulated according to said transformation information.

25. (previously presented) The system of claim 24, wherein:
said processor applies said stylesheet by retrieving said source page from a web server and by identifying said content to be extracted using a site mining expression.

26. (previously presented) The system of claim 24, wherein:
said processor is further capable of determining a site mining expression for uniquely locating said content to be extracted.

27. (previously presented) The system of claim 24, wherein:
said processor generates said stylesheet by receiving and storing to a site mining template said information indicating said content to be extracted and said transformation information for manipulating said content and compiling said template to produce said stylesheet.

28. (previously presented) The system of claim 24, wherein:
said source page comprises a XML compliant document.

29. (previously presented) The system of claim 24, wherein:
said source page comprises a HTML document.

30. (previously presented) A system comprising a central computer for generating a stylesheet, said system comprising:

an interface to receive an indication of an item of content to be extracted from a source page containing one or more items of content and for receiving transformation information for manipulating said item of content;

a processor in communication with said interface to determine an expression for uniquely locating said item of content to be extracted;

a memory to store a site mining template to transform information and said expression; and

a compiler to convert said transformation information and said expression stored in said template to a stylesheet utilizable for mining content from said source page to produce a destination page containing said extracted content.

31. (previously presented) The system of claim 30, wherein:

said interface receives an indication of said source page, retrieves said source page, and transmits said one or more items of content contained in said source page to a display for allowing a selection of said content to be extracted.

32. (previously presented) The system of claim 30, wherein:

said transformation information includes procedural tags for controlling a processing routine in said stylesheet.

33. (previously presented) The system of claim 30, wherein:

said transformation information includes transformation tags for manipulating content extracted from said source page in said stylesheet.

34. (previously presented) The system of claim 30, wherein:

said item of content is delineated by one or more tags.

35. (previously presented) The system of claim 30, wherein:
said compiler converts said information using a two pass compilation process, wherein a first pass generating a main body of said stylesheet and a second pass generating commands located outside of said main body.

36. (previously presented) The system of claim 30, wherein:
said processor determines said expression by receiving filtering criteria via said interface for indicating content to be extracted;
wherein said criteria includes at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

37. (previously presented) The system of claim 30, wherein:
said processor determines said expression by receiving an indication of a root element via said interface and transmitting content stemming from said root element to a display, said content to be extracted is selected from said item of content stemming from said root element, and said expression is determined by combining an expression locating said root element with an expression locating said selected content relative to said root element.

38. (previously presented) The system of claim 30, wherein:
said source page comprises a XML compliant document.

39. (previously presented) The system of claim 30, wherein:
said source page comprises a HTML document.

40. (previously presented) The system of claim 30, wherein:
said expression comprises an XPath syntax expression.

41. (previously presented) The system of claim 30, wherein:
said stylesheet includes a XSLT stylesheet.

42. (previously presented) A system comprising a central computer for generating a site mining expression for use in locating one item of content of a plurality of items of content contained in a source page, said system comprising:

an interface for transmitting said plurality of items of content to a graphical user interface for hierarchically display in tree view form and receiving a selection from said graphical user interface for said one item of content; and

a processor in communication with said interface and capable of generating a site mining expression for locating said one item of content in said source page, said site mining expression is capable of locating content in a document written in an extensible markup language;

wherein said one item of content is to be extracted from said source page; and

wherein said interface transmits any graphical components of said one item of content for display on said graphical user interface upon receiving said selection.

43. (previously presented) The system of claim 42, wherein:
said site mining expression comprises an XPath expression.

44. (previously presented) A system for extracting and transforming content from a source page for transmission to a mobile device, said system comprising:

a server comprising a processor and a memory, said processor generating a stylesheet that comprises information indicating said content to be extracted from said source page and transformation information for manipulating said content based on capabilities of said mobile device, receiving from said mobile device a request to display said source page, applying said stylesheet to said source page to produce a destination page that includes said extracted content manipulated according to said transformation information and transmitting said destination page to said mobile device.

45. (previously presented) The system of claim 44, wherein:

said processor is further capable of determining a site mining expression for uniquely locating said content to be extracted.

46. (previously presented) The system of claim 44, wherein:

said stylesheet is generated by receiving and storing to a site mining template said information indicating said content to be extracted and said transformation information for manipulating said content, and compiling said template to produce said stylesheet.

47. (previously presented) A system for generating a stylesheet, said system comprising:

a server comprising a memory and processor to receive format information to format a layout of said stylesheet, to receive an indication of an item of content to be extracted from a source page containing one or more items of content, to determine an expression for uniquely locating said item of content to be extracted, to receive transformation information for manipulating said item of content, to store said format information, said transformation information and said expression to a site mining template, and to convert said transformation information and said expression stored in said template to a stylesheet utilizable for mining content from said source page to produce a destination page containing said extracted content.

48. (previously presented) The system of claim 47, wherein:

said transformation information includes transformation tags for manipulating content extracted from said source page in said stylesheet.

49. (previously presented) The system of claim 47, wherein:

said expression is determined by receiving filtering criteria for indicating content to be extracted, said criteria comprising at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page, and content containing specific text.

50. (previously presented) The system of claim 47, wherein:

said expression is determined by receiving an indication of a root element and displaying content stemming from said root element, said content to be extracted is selected from said item of content stemming from said root element and said expression is determined by combining an expression locating said root element with an expression locating said selected content relative to said root element.

51. (previously presented) A system for generating a site mining expression for use in locating one item of content of a plurality of items of content contained in a source page, said system comprising:

a server comprising a memory and a processor to display said plurality of items of content on a graphical user interface hierarchically in tree view form, to receive a selection for said one item of content to be extracted from said source page, to display any graphical components of said one item of content and to generate a site mining expression for locating said one item of content in said source page, said site mining expression to locate content in a document written in an extensible markup language.

52. (previously presented) The system of claim 51, wherein:

said processor is further capable of receiving filtering criteria for indicating content to be extracted;

wherein said criteria comprises at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

53. (previously presented) The system of claim 51, wherein:

said processor is further capable of receiving a designation of an item of content as a root element and displaying items of content stemming from said root element;

wherein said item of content to be extracted is selected from said item of content stemming from said root element, and said expression is determined by combining an expression locating said root element with an expression locating said item of content to be extracted relative to said root element.

54. (previously presented) A computer program implemented on a computer-readable medium for extracting and transforming content from a source page for transmission to a mobile device, said program comprising:

computer-readable instructions to generate a stylesheet comprising information indicating said content to be extracted from said source page and transformation information for manipulating said content based on capabilities of said mobile device;

computer-readable instructions to receive a request to display said source page from said mobile device;

computer-readable instructions to apply said stylesheet to said source page to produce a destination page comprising said extracted content manipulated according to said transformation information; and

computer-readable instructions to transmit said destination page to said mobile device.

55. (previously presented) The computer program of claim 54, further comprising:

computer-readable instructions to receive said source page from a web server; and

computer-readable instructions to identify said content to be extracted using a site mining expression.

56. (previously presented) The computer program of claim 54, further comprising:

computer-readable instructions to determine a site mining expression for uniquely locating said content to be extracted.

57. (previously presented) The computer program of claim 54, further comprising:

computer-readable instruction to receive and to store to a site mining template said information indicating said content to be extracted and said transformation information for manipulating said content; and

computer-readable instructions to compile said template to produce said stylesheet.

58. (previously presented) The computer program of claim 54, wherein:

said source page comprises a XML compliant document.

59. (previously presented) The computer program of claim 54, wherein:

said source page comprises a HTML document.

60. (previously presented) A computer program implemented on a computer-readable medium for generating a stylesheet, said program comprising:

- computer-readable instructions to receive an indication of an item of content to be extracted from a source page containing one or more items of content;

- computer-readable instructions to determine an expression for uniquely locating said item of content to be extracted;

- computer-readable instructions to receive transformation information for manipulating said item of content;

- computer-readable instructions to store said transformation information and said expression to a site mining template; and

- computer-readable instructions to convert transformation information by and expression stored in said template to a stylesheet utilizable for mining content from said source page to produce a destination page containing said extracted content.

61. (previously presented) The computer program of claim 60, wherein said program further comprises:

- computer-readable instructions to receive an indication of said source page;

- computer-readable instructions to receive said source page; and

- computer-readable instructions to display said one or more items of content contained in said source page to allow a selection of said content to be extracted.

62. (previously presented) The computer program of claim 60, wherein said transformation information comprises:

- procedural tags to control a processing routine in said stylesheet.

63. (previously presented) The computer program of claim 60, wherein said transformation information comprises:

transformation tags to manipulate content extracted from said source page in said stylesheet.

64. (previously presented) The computer program of claim 60, wherein:

said item of content is delineated by one or more tags.

65. (previously presented) The computer program of claim 60, wherein said instructions for converting further comprises:

computer-readable instructions to compile said template with a two pass compilation process, a first pass to generate a main body of said stylesheet and a second pass to generate commands located outside of said main body.

66. (previously presented) The computer program of claim 60, wherein said instructions for determining an expression further comprises:

computer-readable instructions to receive filtering criteria for indicating content to be extracted, said criteria comprising at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

67. (previously presented) The computer program of claim 60, wherein said instructions for determining an expression further comprises:

computer-readable instructions to receive an indication of a root element; and

computer-readable instructions to display content stemming from said root element, said content to be extracted is selected from said item of content stemming from said root element and said expression is determined by combining an expression locating said root element with an expression locating said selected content relative to said root element.

68. (previously presented) The computer program of claim 60, wherein:

said source page comprises a XML compliant document.

69. (previously presented) The computer program of claim 60, wherein:

said source page comprises a HTML document.

70. (previously presented) The computer program of claim 60, wherein:

said expression comprises an XPath syntax expression.

71. (previously presented) The computer program of claim 60, wherein:

said stylesheet includes a XSLT stylesheet.

72. (previously presented) A computer program implemented on a computer-readable medium for generating a site mining expression for use in locating one item of content of a plurality of items of content contained in a source page, said program comprising:

- computer-readable instructions to display said plurality of items of content on a graphical user interface hierarchically in tree view form;

- computer-readable instructions to receive a selection for said one item of content to be extracted from said source page;

- computer-readable instructions to display any graphical components of said one item of content; and

- computer-readable instructions to generate a site mining expression for locating said one item of content in said source page, said site mining expression is capable of locating content in a document written in an extensible markup language.

73. (previously presented) The computer program of claim 72, wherein:

- said site mining expression comprises an XPath expression.

74. (previously presented) The computer program of claim 72, further comprising:

- computer-readable instructions to receive filtering criteria for indicating content to be extracted, said criteria comprising at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

75. (previously presented) The computer program of claim 72, further comprising:

computer-readable instructions to receive a designation of an item of content as a root element; and

computer-readable instructions to display an item of content stemming from said root element, said item of content to be extracted is selected from said item of content stemming from said root element, and said expression is determined by combining an expression locating said root element with an expression locating said item of content to be extracted relative to said root element.

76. (previously presented) A system for extracting and transforming content from a source page for transmission to a mobile device, said system comprising:

means for generating a stylesheet comprising information indicating said content to be extracted from said source page and transformation information for manipulating said content based on capabilities of said mobile device;

means for receiving from said mobile device a request to display said source page;

means for applying said stylesheet to said source page to produce a destination page comprising said extracted content manipulated according to said transformation information; and

means for transmitting said destination page to said mobile device.

77. (previously presented) The system of claim 76, further comprising:

means for retrieving said source page from a web server; and

means for identifying said content to be extracted using a site mining expression.

78. (previously presented) The system of claim 76, further comprising:

means for determining a site mining expression for uniquely locating said content to be extracted.

79. (previously presented) The system of claim 76, further comprising:

means for receiving and storing to a site mining template said information indicating said content to be extracted and said transformation information for manipulating the content; and

means for compiling said template to produce said stylesheet.

80. (previously presented) The system of claim 76, wherein:
said source page comprises a XML compliant document.

81. (previously presented) The system of claim 76, wherein:
said source page comprises a HTML document.

82. (previously presented) A system for generating a stylesheet, said system comprising:

means for receiving an indication of an item of content to be extracted from a source page containing one or more items of content;

means for determining an expression to uniquely locate said item of content to be extracted;

means for receiving transformation information to manipulate said item of content;

means for storing said transformation information and said expression to a site mining template; and

means for converting said transformation information and expression stored in said template to a stylesheet to mine content from said source page to produce a destination page containing said extracted content.

83. (previously presented) The system of claim 82, further comprising:

means for receiving format information to format a layout of said stylesheet; and

means for storing said format information to said template.

84. (previously presented) The system of claim 82, further comprising:

means for receiving an indication of said source page;

means for retrieving said source page; and

means for displaying said one or more items of content contained in said source page to allow a selection of said content to be extracted.

85. (previously presented) The system of claim 82, wherein:

said transformation information includes procedural tags for controlling a processing routine in said stylesheet.

86. (previously presented) The system of claim 82, wherein:

said transformation information includes transformation tags for manipulating content extracted from said source page in said stylesheet.

87. (previously presented) The system of claim 82, wherein:

said item of content is delineated by one or more tags.

88. (previously presented) The system of claim 82, further comprising:

means for compiling said template with a two pass compilation process, a first pass generates a main body of said stylesheet and a second pass generates commands located outside of said main body.

89. (previously presented) The system of claim 82, further comprising:

means for receiving filtering criteria to indicate content to be extracted, said criteria comprising at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

90. (previously presented) The system of claim 82, further comprising:

means for receiving an indication of a root element; and

means for displaying content stemming from said root element, said content to be extracted is selected from said item of content stemming from said root element;

wherein said expression is determined by combining an expression locating said root element with an expression locating said selected content relative to said root element.

91. (previously presented) The system of claim 82, wherein:
said source page comprises a XML compliant document.

92. (previously presented) The system of claim 82, wherein:
said source page comprises a HTML document.

93. (previously presented) The system of claim 82, wherein:
said expression comprises an XPath syntax expression.

94. (previously presented) The system of claim 82, wherein:
said stylesheet includes a XSLT stylesheet.

95. (previously presented) A system for generating a site mining expression for use in locating one item of content of a plurality of items of content contained in a source page, said system comprising:

means for displaying said plurality of items of content on a graphical user interface hierarchically in tree view form;

means for receiving a selection for said one item of content extracted from said source page;

means for displaying graphical components of said one item of content; and

means for generating a site mining expression to locate said one item of content in said source page, said site mining expression to locate content in a document written in an extensible markup language.

96. (previously presented) The system of claim 95, wherein:

said site mining expression comprises an XPath expression.

97. (previously presented) The system of claim 95, further comprising:

means for receiving filtering criteria to indicate content to be extracted, wherein said criteria includes at least one of selecting a single item of content located at a particular position, siblings of said item of content, similarly named siblings of said item of content, similarly named items of content located anywhere within said source page and content containing specific text.

98. (previously presented) The system of claim 95, further comprising:

means for receiving a designation of an item of content as a root element; and

means for displaying items of content stemming from said root element;

wherein said item of content to be extracted is selected from said item of content stemming from said root element and said expression is determined by combining an expression locating said root element with an expression locating said item of content to be extracted relative to said root element.